

CLAIMS

1. A method of production of a rubbery polymer comprising feeding a polymer latex and a coagulation solution containing a coagulating agent to a crusher pump and bringing said polymer latex and said coagulating agent into contact so as to make the rubbery polymer ingredient coagulate and obtain a crumb slurry containing a crumb rubbery polymer, wherein said crusher pump has a head of 10 m or more.

2. The method of production of a rubbery polymer as set forth in claim 1, wherein said crusher pump has
first blades for crushing the coagulated rubbery polymer ingredient and

second blades provided at the outer circumference of said first blades.

3. The method of production of a rubbery polymer as set forth in claim 2, wherein said crusher pump has a stationary frame between said first blades and said second blades.

4. The method of production of a rubbery polymer as set forth in claim 3, wherein through holes for discharging the rubbery polymer ingredient crushed by said first blades from said first blades to the direction of said second blades are formed in said stationary frame.

5. The method of production of a rubbery polymer as set forth in any one of claims 1 to 4, wherein

said method has a step of running said crumb slurry from a discharge port of said crusher pump through a pipe and releasing it into the atmosphere,

a ratio (L/D) of a length L of said pipe and an inside diameter D of the discharge port of said pump being not more than

20.

6. The method of production of a rubbery polymer as set forth in any one of claims 1 to 5, wherein the method further has a washing step of washing said crumb slurry by water so as to remove said coagulating agent from the crumb rubbery polymer.

7. The method of production of a rubbery polymer as set forth in any one of claims 1 to 6, wherein the method further has
a squeezing step of squeezing out the moisture from said crumb slurry to obtain a crumb rubbery polymer and
a step of drying by heating the crumb rubbery polymer from which said moisture has been squeezed out.

8. The method of production of a rubbery polymer as set forth in any one of claims 1 to 7, wherein the method further has a step of discharging said crumb slurry into a tank and stirring said crumb slurry in said tank.

9. The method of production of a rubbery polymer as set forth in any one of claims 1 to 8, wherein said polymer latex is a latex of an unsaturated nitrile-conjugated diene copolymer obtained by emulsion polymerization.

10. The method of production of a rubbery polymer as set forth in any one of claims 1 to 9, wherein said coagulating agent is at least one type selected from the group comprised of calcium chloride, magnesium sulfate, and aluminum sulfate.

11. An apparatus for production of a rubbery polymer comprising

a crusher pump in which a polymer latex and a coagulation solution containing a coagulating agent can be brought into contact and mixed,

said pump having a head of 10 m or more.

12. A method of production of a rubbery polymer having:

a first step of feeding a polymer latex and a coagulation solution containing a coagulating agent to a crusher pump and bringing said polymer latex and said coagulating agent into contact to make the rubbery polymer ingredient coagulate and obtain a crumb slurry containing a crumb rubbery polymer and

a second step of running said crumb slurry from a discharge port of said pump through a pipe and releasing it into the atmosphere,

a ratio (L/D) of a length L of said pipe and an inside diameter D of the discharge port of said pump being not more than 20.

13. An apparatus for production of a rubbery polymer comprising

a crusher pump in which a polymer latex and a coagulation solution containing a coagulating agent can be brought into contact and mixed and

a pipe for releasing a crumb slurry containing a crumb rubbery polymer discharged from a discharge port of said crusher pump into the atmosphere, wherein

a ratio (L/D) of a length L of said pipe and an inside diameter D of the discharge port of said pump is not more than 20.